

REMARKS

This is intended as a full and complete response to the Office Action dated May 22, 2006 (hereinafter "the Office Action") having a shortened statutory period for response set to expire on August 22, 2006.

Claims 1-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,487,648 ("Hassoun") in view of U.S. Patent No. 5,625,580 ("Read"). With this rejection, Applicants respectfully disagree, at least for the reasons set forth below.

It is now well established that the Patent Office bears the burden of establishing a *prima facie* case to maintain a rejection for obviousness. Failure to make such a *prima facie* showing by the Patent Office is to result in a withdrawing of the rejection.

The MPEP states what the Patent Office considers to be a "*prima facie* case" of obviousness at Section 706.02(j). Taking *arguendo* the Patent Office criteria of a "*prima facie* case" of obviousness as the standard, it will become apparent that the instant rejection for obviousness fails to meet such criteria and, accordingly, that the rejection of Claims 1-27 for obviousness is improper and should be withdrawn.

According to the Patent Office, the first element of a *prima facie* case for obviousness is that there must be some suggestion or motivation to modify a reference or combine the teachings of the references. This suggestion must come from either of the references or be knowledge generally available to one of ordinary skill in the art.

In the Office Action, it is stated that "[i]t would have been obvious... to combine the teachings of Hassoun with Read et al. for the purpose of accuracy and improvement in hardware modeling and timing behavior analysis." In the Office Action, it is further stated that "Read et al. further reliability and cost ..." In other words, the Office Action offers two general motives for combining these references: improving hardware modeling and timing behavior analysis and furthering reliability and cost. Assuming *arguendo* that these two objectives may be met by the combination proffered in the Office Action, these two general motives do not provide legally sufficient suggestion or motivation for such combination. The Federal Circuit

has said that “[a] general relationship between fields of the prior art patents to be combined is insufficient to establish the suggestion or motivation.” (*Interactive Techs. v. Pittway Corp.*, Civ. App. No. 98-1464, slip op. at 13 (Fed. Cir. June 1, 1999) (*unpublished*), *cert. denied*, 528 U.S. 1046 (1999).)

In the instant rejection, nothing in the Office Action indicates that there is any suggestion in either of the references for this combination. Thus, the combination cannot rest upon any suggestion in either of the references. Moreover, it is Applicants’ position that the above-quoted statements regarding these references provide no reasonable basis for the assertion that one of ordinary skill in the art would be led to combine these two particular references out of all the references potentially available.

It is Applicant’s position that Hassoun is silent as to detecting clock stabilization for hardware simulation. In fact, Hassoun is silent as to hardware simulation at all. What Hassoun discloses is that software is used for creating an SDRAM controller design for instantiation in a PLD. This controller core is provided from the manufacture as a design file. Hassoun goes on to describe this SDRAM controller core, but does not describe whether or how the core is simulated by the manufacture thereof. (*Hassoun*, at col. 7, lines 49-65.)

While Read is not silent with respect to hardware simulation, Read is silent as to detecting clock stabilization as claimed. Read programs an edge to occur at a time relative to the start of pattern clock. (*Read*, col. 23, lines 23-63.) Read uses a timing strobe to format pattern data before presenting to the “hardware modeling element” or “HME.” (*Id.*) Read is silent with respect to detecting clock stabilization as claimed for providing such strobes. (See, e.g., *Read*, col. 26, line 9, to col. 27, line 40.)

Accordingly, it is Applicants’ position that there is no legally sufficient suggestion or motivation for combining Hassoun and Read, as both are silent as to detecting clock stabilization as claimed. Notwithstanding this position, Applicants have amended claims 1, 8, 11, 12, 13, 14, 24, and 27 to expressly state that application of an output clock signal is masked until the output clock signal is sufficiently stabilized as indicated by a control signal for a hardware simulation. Thus, even though Applicants believe that detection of clock stabilization and hardware simulation was at least inherent in the claims as originally presented, Applicants have amended each of

the base claims to further advance this understanding.

According to the Patent Office, the second element of a *prima facie* case for obviousness is that there must be a reasonable expectation of success. As an initial matter, the Office Action does not even address the issue of a reasonable expectation of success. Given that the burden rests with the Patent Office to demonstrate obviousness, this failure to present evidence for this element of the *prima facie* case suggests that the rejection on the basis of obviousness should be withdrawn.

Applicants are placed in the position of responding to an argument regarding a reasonable expectation of success that has not even been made by the Office Action. In order to ascertain whether there would be such a reasonable expectation of success, there must be some understanding of how the primary reference of Hassoun is to be modified by the secondary reference of Read to arrive at the claimed invention. Presently, there is no indication in the Office Action of how the teachings of Hassoun are to be reengineered in view of the teachings of Read to arrive at the claimed invention. Again, as both Hassoun and Read are silent as to detecting clock stabilization there is no basis to provide any indication of how the references may be modified to detect clock stabilization.

According to the Patent Office, the third element of a *prima facie* case for obviousness is that the cited prior art references must teach or suggest all the claim limitations.

According to Hassoun, clock skew and clock delay are addressed using DLLs. (Hassoun, at col. 9, line 58, to col. 10 line 13.) In Hassoun, neither DLL 304A nor DLL 304B produces a lock signal for a state machine. (*Id.*; see *also*, Hassoun at Figures 3 and 4.) Furthermore, in Hassoun there is no masking of the outputs of DLLs 304A and 304B, as clock outputs from DLLs 304A and 304B are buffered but not masked. (*Id.*)

According to Read, a timing strobe is used to format data before presenting to a hardware modeling element. (*Read*, col. 23, lines 23-63.) This timing strobe is generated using digital to analog conversion. (*Read*, col. 26, line 9, to col. 27, line 40.)

In contrast to Hassoun and Read, Claims 1, 8, 11, 12, 13, and 14 each recite in relevant part the features of a lock signal to produce a control signal for masking application of a clock signal. Furthermore, in contrast to Hassoun, Claims 24 and 27

each recite in relevant part the features of a lock signal to produce a control signal for selective application of a clock signal.

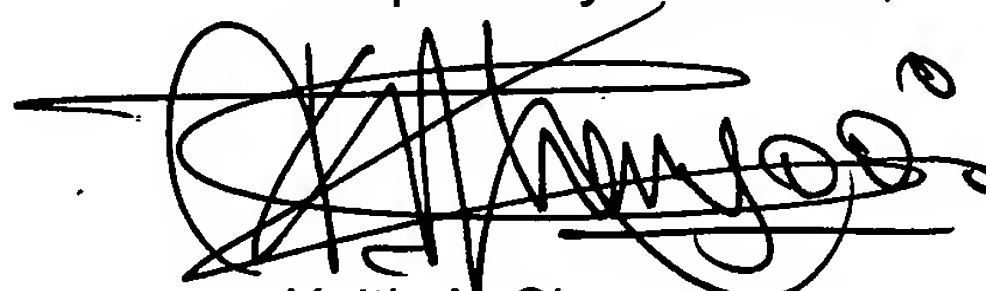
Accordingly, it is respectfully submitted that for these reasons Hassoun and Read do not show, describe, or suggest all of the claim limitations of Claims 1, 8, 11, 12, 13, 14, 24, and 27, and thus Claims 1, 8, 11, 12, 13, 14, 24, and 27 are allowable over the reference of Hassoun in combination with Read. It is respectfully submitted that Claims 1, 8, 11, 12, 13, 14, 24, and 27 are in condition for allowance and such allowance is respectfully requested. Furthermore, Claims 2-7, 9-10, 15-23, and 25-26, which either directly or indirectly depend upon an allowable base Claim, are likewise allowable.

Additionally, it is respectfully submitted that the rejection of Claims 1-27 under 35 U.S.C. § 103(a) as being obvious over Hassoun in view of Read is improper and should be withdrawn for any of the several reasons provided above, and it is respectfully requested that the Application be passed to issuance.

CONCLUSION

All claims are in condition for allowance and a Notice of Allowance is respectfully requested. If there are any questions, the Applicants' attorney can be reached at Tel: 408-879-7710 (Pacific Standard Time).

Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on August 4, 2006.

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